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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,281	12/27/2000	Kenneth G. Stewart III	6714/63409	4744

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EXAMINER

HORTON, YVONNE MICHELE

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,281

Applicant(s)

STEWART, KENNETH G.

Examiner

Yvonne M. Horton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-7,9-11,13-15 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-7,9-11,13-15 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 24-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Withdrawal of Allowable Subject Matter

The indicated allowability of claims 2-3,5-7,9-11,13-15 and 21-26 is withdrawn in view of a more careful review of the reference(s) to KRUG and KOVAR. Rejections based on the newly cited reference(s) follow.

Claim Objections

Claims 21-23 are objected to because of the following informalities:
the phrase "can be" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,551,200 to KRUG. KRUG discloses the use of a stiffening system (10) for securing adjacent joists (14) including a band (18) that spans three joists (14) and rests upon and is secured to a top surface of the at least three joists (14) as at (30,36), at least two truss members (22) configured as a rectangular box and secured to an underside of the band (18) by an adhesive, column 4, line 25, so as to lie between the joist (14) and with each truss (22) extending between two joists (14) and with the at least two truss members (22) aligned with the band (18). The at least two truss members (22) of the stiffener (18) of KRUG also includes vertical side members (colored red) equal in length

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to a spacing (D) between joists (14) wherein the side members (colored red) of each truss (22) abuts the sides (VS) of the joists (14) via the interconnecting stiffener (10) to hold the joists (14) a a specified distance (D), see the marked attachment.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2,3,6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,551,200 to KRUG. Regarding claims 2 and 3, KRUG discloses the use of a stiffening system (10) for securing adjacent joists (14) including a band (18) that spans three joists (14) and rests upon and is secured to a top surface of the at least three joists (14) as at (30,36), at least two truss members (22) secured to an underside of the band (18) by an adhesive, column 4, line 25, so as to lie between the joist (14) and with each truss (22) extending between two joists (14) and with the at least two truss members (22) aligned with the band (18). The at least two truss members (22) of the stiffener (18) of KRUG also includes vertical side members (colored red) equal in length to a spacing (D) between joists (14) wherein the side members (colored red) of each truss (22) abuts the sides (VS) of the joists (14) via the interconnecting stiffener (10) to hold the joists (14) a specified distance (D), see the marked attachment. In reference to claim 2, KRUG discloses the basic claimed stiffener except for explicitly detailing a plurality of BANDS. Although KRUG does not explicitly detail or show a plurality of bands, it would have been obvious to one having ordinary skill in the art a roof truss includes more than the three joists (14) depicted. Hence, it too would have

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been obvious to one having ordinary skill in the art that in order to properly strengthen the roof truss as taught by KRUG, additional stiffening members are present and would be required. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure of KRUG with additional stiffening members incorporating additional bands, since the mere duplication of essential parts of an invention involves only routine skill in the art. As mentioned earlier a roof truss is made up of much more than three joists. If for instance the roof truss comprised nine or twelve joists, it would have been obvious to provide the structure with perhaps 3 or four stiffeners including three or four bands in order to properly strengthen the roof truss at all interconnected areas. Regarding claim 3, KRUG discloses the basic claimed stiffening system except for the band having fastener openings therein. KRUG discloses the use of nails (N) but does not specify the use of apertures for insertion of the nails. It too would have been obvious to one having ordinary skill in the art at the time the invention was made that the band (18) of the stiffener (10) of KRUG have apertures therein where the mechanical connectors (N) are received. Providing apertures, even if partially therethrough, allows for an ease of insertion of the mechanical connector therein. Regarding claims 6 and 7, the trusses (22) are configured as rectangular boxes.

Claims 2,3,6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,551,200 to KRUG in view of KOVAR. KRUG discloses the use of a stiffening system (10) for securing adjacent joists (14) including a band (18) that spans three joists (14) and rests upon and is secured to a top surface of the at least three

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joists (14) as at (30,36), at least two truss members (22) secured to an underside of the band (18) by an adhesive, column 4, line 25, so as to lie between the joist (14) and with each truss (22) extending between two joists (14) and with the at least two truss members (22) aligned with the band (18). The at least two truss members (22) of the stiffener (18) of KRUG also includes vertical side members (colored red) equal in length to a spacing (D) between joists (14) wherein the side members (colored red) of each truss (22) abuts the sides (VS) of the joists (14) via the interconnecting stiffener (10) to hold the joists (14) a specified distance (D), see the marked attachment. Regarding claim 2, KRUG discloses the basic claimed stiffener except for explicitly detailing a plurality of BANDS and except for teaching the use of a truss, in the event that the trusses/blocks (22) of KRUG are not considered to be trusses. Although KRUG does not explicitly detail or show a plurality of bands, it would have been obvious to one having ordinary skill in the art a roof truss includes more than the three joists (14) depicted. Hence, it too would have been obvious to one having ordinary skill in the art that in order to properly strengthen the roof truss as taught by KRUG, additional stiffening members are present and would be required. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure of KRUG with additional stiffening members incorporating additional bands, since the mere duplication of essential parts of an invention involves only routine skill in the art. As mentioned earlier a roof truss is made up of much more than three joists. If for instance the roof truss comprised nine or twelve joists, it would have been obvious to provide the structure with perhaps three or four stiffeners

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including three or four bands in order to properly strengthen the roof truss at all interconnected areas. KOVAR teaches that it is known in the art to provide a joist stiffening member with a truss (10,26,33,42). Thus, it too would have been obvious to provide the assembly of KRUG with the truss of KOVAR in order to provide the assembly of KRUG with the ability to prevent misalignment and warpage of the joists while also providing the system with the ability to allow for the attachment, insertion and maintenance of electrical equipment or devices therein. In reference to claim 3, KRUG discloses the basic claimed stiffening system except for the band having fastener openings therein. KRUG discloses the use of nails (N) but does not specify the use of apertures for insertion of the nails. It too would have been obvious to one having ordinary skill in the art at the time the invention was made that the band (18) of the stiffener (10) of KRUG have apertures therein where the mechanical connectors (N) are received. Providing apertures, even if partially therethrough, allows for an ease of insertion of the mechanical connector therein. Regarding claims 6 and 7, the trusses (10,26) of KOVAR are configured as rectangular boxes.

Claims 9-11,14,15 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,551,200 to KRUG in view of US Patent #4,122,647 to KOVAR. KRUG discloses the basic claimed stiffener except for the use of X-shaped braces, and except for explicitly detailing the use of apertures. In reference to claims 9-11 and 21-23, the truss (10,26) further includes X-shaped braces (16,17) and (30,31) that extend between the corners of the box. The X-shaped braces (16,17) and (30,31) are secured via rivets (17A), column 2, lines 65-66, and can therefore be removed.

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Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure of KRUG with the box truss having removable X-shaped braces, as taught by KOVAR, in order to strengthen the assembly while also providing the assembly with an ease for insertion and maintenance of electrical devices. In the structure of KRUG, alone, one skilled in the art would have to drill a hole in the truss member to allow for electrical equipment use and would have to remove the truss member in order to repair any portion of the truss or the electrical equipment therein; whereas the truss members of KOVAR are open and allow for easy access in both events. Regarding claims 14 and 15, KRUG discloses the use of nails (N) but does not specify the use of apertures for insertion of the nails. It too would have been obvious to one having ordinary skill in the art at the time the invention was made that the vertical sides (colored red) of the truss members (22) would have apertures therein where the mechanical connectors (N) are received. Providing apertures, even if partially therethrough, allows for an ease of insertion of the mechanical connector therein.

Allowable Subject Matter

Claims 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (703) 308-0839. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



YMH
May 12, 2004

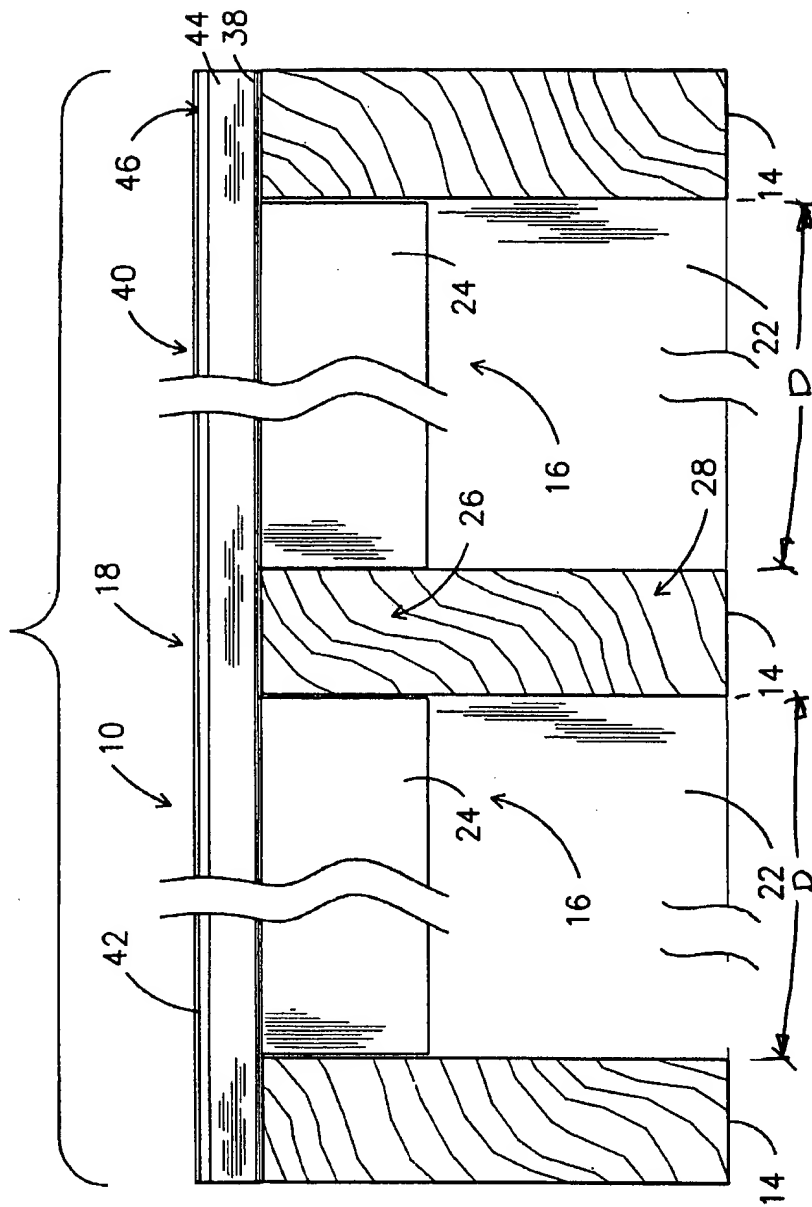


Fig. 2

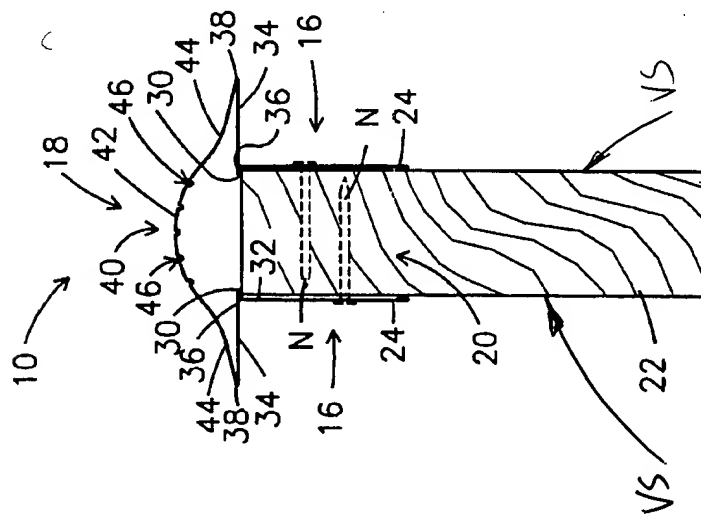


Fig. 1

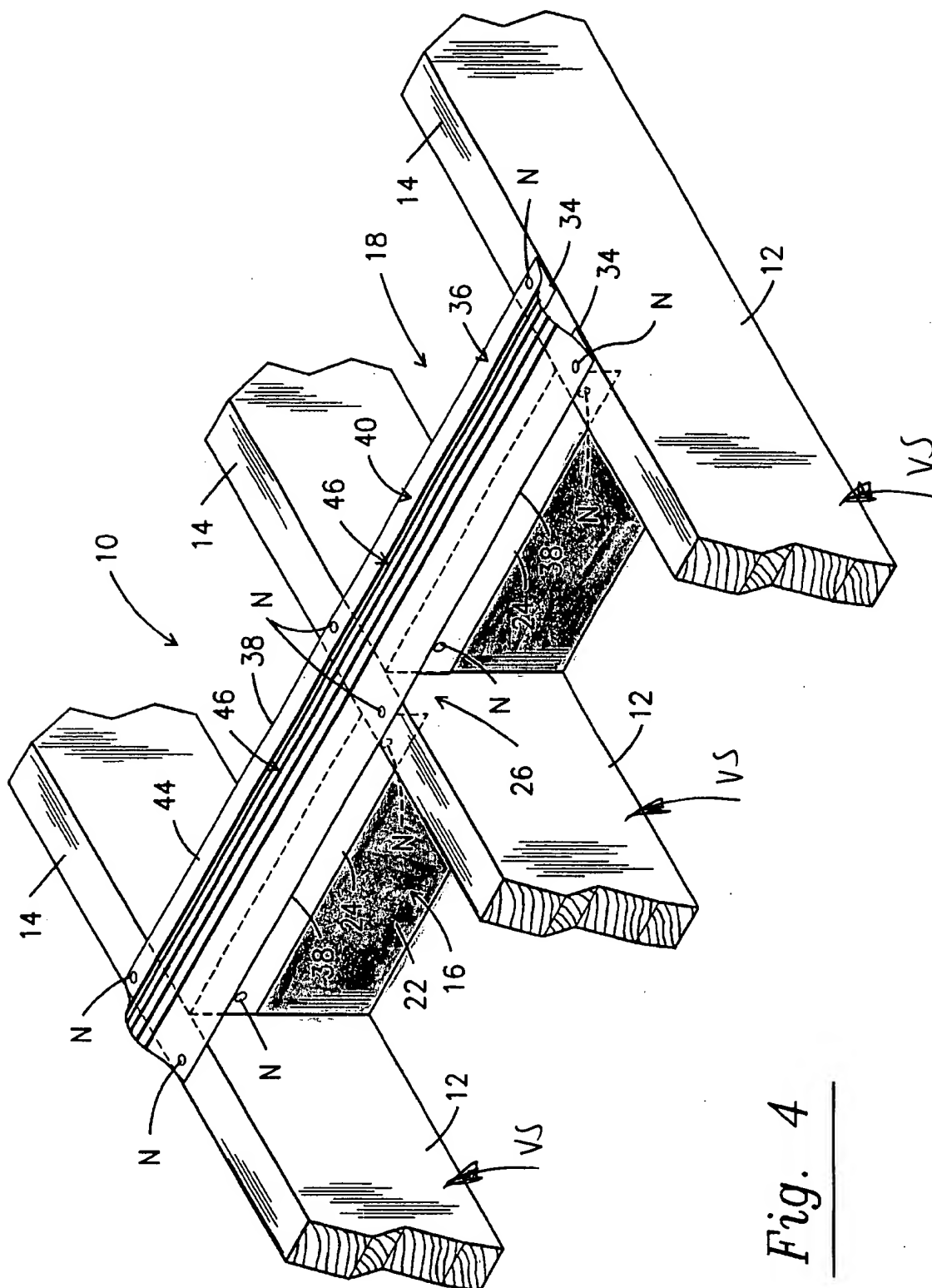


Fig. 4

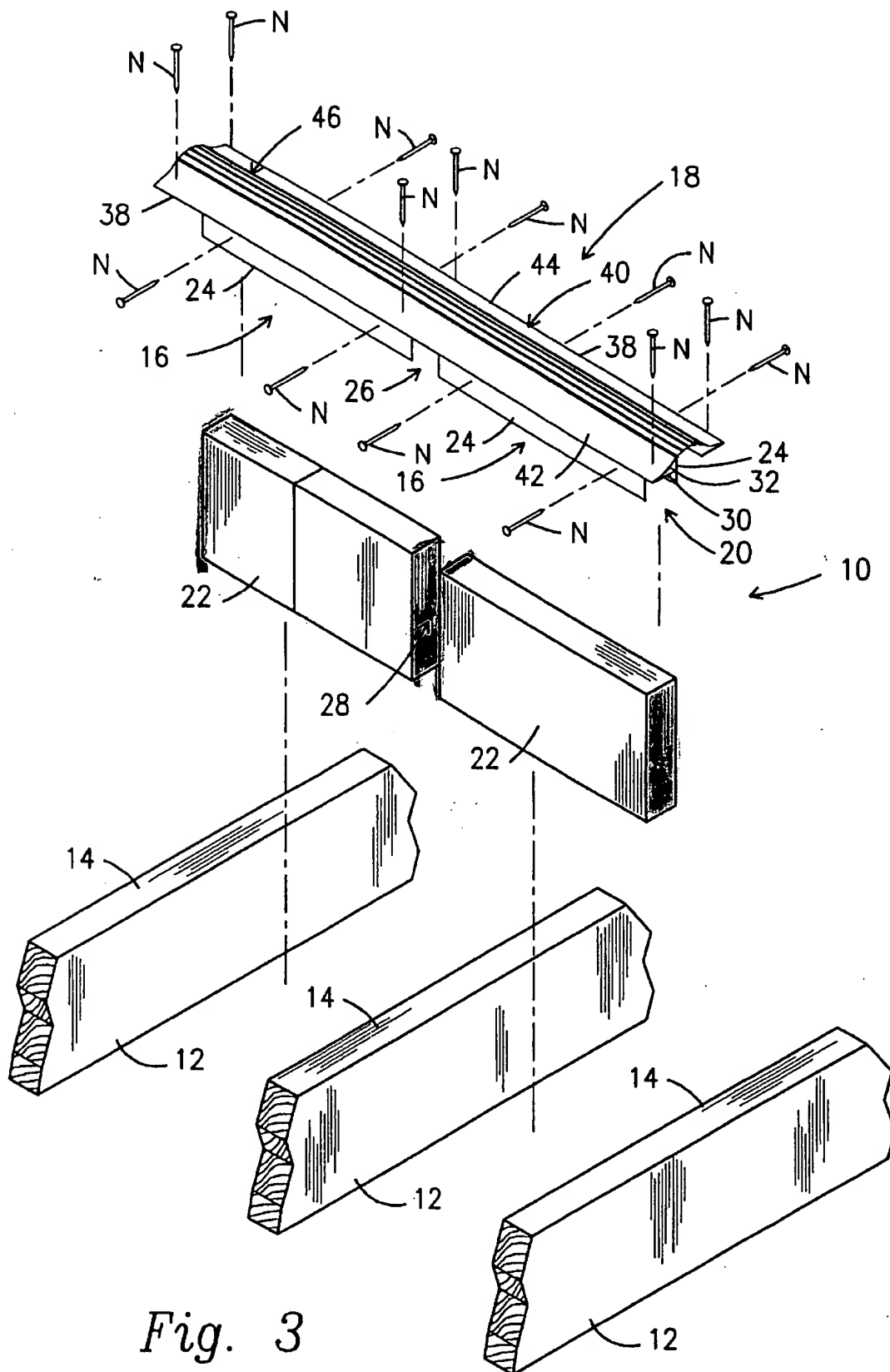


Fig. 3